

IN THE CLAIMS:

The currently pending claims are as follows:

1-7. (canceled)

8. (previously presented) Brush sealing ring for use as a sealing element between components which can move relative to one another, in particular between a rotor and a stator as an element which is fixed to the stator, having an annular housing and having a multiplicity of aramid fiber-based bristles which are attached within the housing and protrude radially or axially out of the contour of the housing and whose free end faces form tangents with an imaginary, rotationally symmetrical or planar face, the bristles being composed of sections of strands of aramid fibers which are present in a wound arrangement, each section running in a loop shape around a core extending away from it without crossing over in such a way that its two end faces form tangents with the same imaginary face which is spaced apart from the core, and the sections being arranged around the core in a plurality of layers one on top of the other and being secured in a fixed fashion with a clamping section,

wherein the strands are composed exclusively of fine, angel hair-like aramid fibers and the bristles formed from the strands have a diameter of less than one-tenth of a millimeter,

wherein the clamping section is prestressed by elastic cross-sectional widening, and

wherein sections of the strands are secured between the core and the clamping section exclusively by means of frictional locking which is dependent on

an amount the clamping section is prestressed.

9. (previously presented) Brush sealing ring according to Claim 8, wherein the core is shaped from a metal wire with a round cross section and the clamping section is shaped from a metallic round tube which is slotted in the longitudinal direction.

10. (previously presented) Brush sealing ring according to Claim 8, wherein, in addition to their, essentially, radial or axial orientation, the sections have a directional component in the circumferential direction outside the clamping region.

11. (previously presented) Brush sealing ring according to Claim 9, wherein, in addition to their, essentially, radial or axial orientation, the sections have a directional component in the circumferential direction outside the clamping region.

12. (previously presented) Brush sealing ring according to Claim 8, wherein the sections have end faces which are manufactured by mechanical cutting or shearing off, by laser beam cutting, if appropriate with water cooling ("laser micro jet process"), or by means of water jet cutting.

13. (previously presented) Brush sealing ring according to Claim 9, wherein the sections have end faces which are manufactured by mechanical cutting or shearing off, by laser beam cutting, if appropriate with water cooling ("laser micro jet process"), or by means of water jet cutting.

14. (previously presented) Brush sealing ring according to Claim 10, wherein the sections have end faces which are manufactured by mechanical cutting or shearing off, by laser beam cutting, if appropriate with water cooling ("laser micro jet process"), or by means of water jet cutting.

15. (previously presented) Brush sealing ring according to Claim 11, wherein the sections have end faces which are manufactured by mechanical cutting or shearing off, by laser beam cutting, if appropriate with water cooling ("laser micro jet process"), or by means of water jet cutting.

16-19. (canceled)

20. (previously presented) Use of a sealing ring according to Claim 8, wherein the sealing ring is configured for sealing predominantly gaseous fluids, including hydrogen.

21. (previously presented) Use of a sealing ring according to Claim 9, wherein the sealing ring is configured for sealing predominantly gaseous fluids, including hydrogen.

22. (previously presented) Use of a sealing ring according to Claim 10, wherein the sealing ring is configured for sealing predominantly gaseous fluids, including hydrogen.

23. (previously presented) Use of a sealing ring according to Claim 12, wherein the sealing ring is configured for sealing predominantly gaseous fluids, including hydrogen.

24. (canceled)

25. (previously presented) Use of a sealing ring according to Claim 8, wherein the sealing ring is configured for use in turbo machines of all kinds as well as in electric generators.

26. (previously presented) Use of a sealing ring according to Claim 9, wherein the sealing ring is configured for use in turbo machines of all kinds as well as in electric generators.

27. (previously presented) Use of a sealing ring according to Claim 10, wherein the sealing ring is configured for use in turbo machines of all kinds as well as in electric generators.

28. (previously presented) Use of a sealing ring according to Claim 12, wherein the sealing ring is configured for use in turbo machines of all kinds as well as in electric generators.

29. (canceled)

30. (previously presented) Use of a sealing ring according to Claim 20, wherein the sealing ring is configured for use in turbo machines of all kinds as well as in electric generators.

31. (previously presented) A bush sealing ring for sealing a space between a rotor and a stator comprising:

- an annular housing fixed in use to said stator,
- a core carried by the annular housing, and
- a plurality of separate strand sections extending in a loop around the core and extending with end faces forming tangents with an annular face spaced from the core, and
- a clamp securing said strand sections to the core,

wherein the strand sections are formed exclusively of fine, angel hair aramid fibers having a diameter of less than one-hundredth of a millimeter, wherein the clamp is prestressed by elastic cross-sectional widening, and wherein the strand sections are secured between the clamp and the core exclusively by fictional clamping which is dependent on an amount the clamp is prestressed.

32. (previously presented) A brush sealing ring according to Claim 31, wherein the core is shaped from a metal wire with a round cross section and the clamping section is shaped from a metallic round tube which is slotted in the longitudinal direction.

33-34 (canceled)

35. (previously presented) A brush sealing ring according to Claim 31, wherein said rotor and stator are part of a turbo machine.

36. (previously presented) A brush sealing ring according to Claim 31, wherein said rotor and stator are part of an electric generator.

37. (previously presented) A method of making a sealing ring for sealing a space between a rotor and a stator, comprising:

fixing an annular seal housing to said stator,

placing a core in said annular seal housing with a plurality of separate fiber strand sections looped around the core which extend with end faces forming tangents with an annular face spaced from the core to sealing engage the rotor, prestressing a clamp by elastic cross-sectional widening, clamping the strand sections to the core by the prestressed clamp, wherein the strand sections are formed exclusively of fine, angel hair aramid fibers having a diameter of less than one-hundredth of a millimeter, and wherein the strand sections are secured between the clamp and the core exclusively by fictional clamping which is dependent on an amount the clamp is prestressed.

38. (previously presented) A method according to Claim 37, wherein the core is shaped from a metal wire with a round cross section and the clamping section is shaped from a metallic round tube which is slotted in the longitudinal direction.

39-41. (canceled)

42. (previously presented) A method according to Claim 37, wherein said rotor and stator are part of a turbo machine.